DOCUMENT RESUME

ED 396 013 UD 030 953

AUTHOR	Schwartz, Wendy
TITLE	How To Promote the Science and Mathematics Achievement of Females and Minorities. For Parents/about Parents.
INSTITUTION	ERIC Clearinghouse on Urban Education, New York, N.Y.
SPONS AGENCY	Office of Educational Research and Improvement (ED), Washington, DC.
PUB DATE	[95]
CONTRACT	RR93002016
NOTE	5p.; For related documents, see UD 030 946-958.
PUB TYPE	Guides - Non-Classroom Use (055) -- Information Analyses - ERIC Clearinghouse Products (071)
EDRS PRICE	MF01/PC01 Plus Postage.
DESCRIPTORS	*Academic Achievement; Bilingual Education; *Course Selection (Students); Elementary Secondary Education; *Females; Helping Relationship; *Mathematics Achievement; *Minority Groups; *Parent Role; Role Models; Student Educational Objectives; Student Interests; Student Participation
IDENTIFIERS	Goal Setting

ABSTRACT

Some minority and female students traditionally have not been given the help they need to enroll and succeed in mathematics and science classes. Now, however, a variety of approaches are available to give these students the extra attention they need. Parents can help children develop an interest in science and mathematics by: (1) identifying role models; (2) stressing the importance of high academic goals and insisting that students not put limits on themselves; (3) encouraging students to interact with teachers and participate actively in class; (4) demonstrating the usefulness of science and mathematics in daily living; (5) urging children to enroll in extracurricular science and mathematics programs; (6) helping children locate question-answering services for homework help; (7) finding tutors and programs to meet the child's needs; and (8) participating in science and mathematics learning activities. Parents should work with the school to make sure children learn advanced science, technology, and mathematics. Schools should be urged to provide this instruction in the children's native language to keep them from losing time as they learn English. (SLD)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED 396 013

ERIC

for parents/about parents

HOW TO PROMOTE THE SCIENCE AND MATHEMATICS ACHIEVEMENT OF FEMALES AND MINORITIES

UD 030 953

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

X This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

BEST COPY AVAILABLE

Today, it is necessary to know advanced science, mathematics, and technology to have a high-paying and satisfying career. But, unfortunately, some minority and female students have not been given the help they need to enroll and succeed in these classes in elementary and high school. Now, though, there are a variety of education policies and programs that do give these students the extra attention they need. Parents can increase the success of these programs by encouraging your children in many important ways.

AT HOME

Parents can help children develop an interest in science and mathematics by doing these things:

- Find and point out professional female and minority role models working in science, technology, and math, so your children will believe that they, too, can have these careers.

- Stress that your children should set their sights high, and not put limits on themselves:

    - Minority students can move on to good technical careers in the future, even though only a limited number of minorities did so in the past.

    - Female students should not think that it is "unfeminine" to

do very well in science and math classes.

- Physically challenged students can handle technology as well as other students, and may actually benefit from it in especially important ways.

- Encourage your children to interact with teachers and to volunteer in class even if this behavior with adults isn't part of their native culture or life at home.

- Demonstrate how useful science and math are to daily living so that children can see why it is important to learn these subjects. For example, math is necessary to making the family budget, and science is needed to use home appliances and a car. Asking your children to help at home on projects where science and math are used is a good learning activity as well as a way to promote their sense of responsibility.

- Urge your children to enroll in extracurricular science and math programs. For example, museums, planetariums, and other cultural institutions have programs for students. Sometimes, parents can also participate.

- Help your children locate question-answering services if they need help with homework. Some libraries, and cable and public television stations, offer them.

- If your children are doing especially well in science or math classes, or having problems in the classes, seek out special programs or tutors to meet their specific needs.

- Whenever possible, participate in your children's science and math learning activities, by teaching them directly, helping with homework, and attending events together.

AT SCHOOL

It is also important for parents to work with schools to be sure your children will learn advanced science, technology, and math. Parents can:

- Urge schools to hire a diverse staff of both men and women that reflects the cultures of the students so that students will have role models to encourage their achievement.

- Promote commitment by the school staff to the beliefs that *all* students should be taught advanced science and math, that *all* students can succeed in these classes, and that special help will be given to students who need it in order to succeed.

- Offer to help organize a science fair.

- Offer to help recruit culturally diverse role models for a career day program.

- Urge schools to provide advanced science and math classes in your children's native language, if it is not English, while they are also developing their English skills. In these classes, they can solve problems that are set in familiar situations and that are presented in a familiar language. Learning science and math in their native language will increase your children's ability to succeed, and keep them from losing valuable time in school while they are learning English.

This guide was written by Wendy Schwartz for the ERIC Clearinghouse on Urban Education. Please send a stamped, self-addressed envelope to the Clearinghouse for a list of other Clearinghouse publications.

Other guides to help parents help their children learn can be found on the National Parent Information Network (NPIN) on the Internet. You can reach the NPIN World Wide Web at http://ericps.ed.uiuc, or the NPIN Gopher at gopher://ericps.ed.uiuc.edu. Ask someone in your local library, your children's school, or your parent center how to see the information on this network.

This publication was developed by the ERIC Clearinghouse on Urban Education with funding from the Office of Educational Research and Improvement, U.S. Department of Education, under contract no. RR93002016. The opinions in this publication do not necessarily reflect the position or policies of OERI or the Department of Education.

ERIC Clearinghouse on Urban Education
Box 40
Teachers College
Columbia University
New York, NY 10027
800/601-4868
Fax: 212/678-4012
Internet: eric-cue@columbia.edu